

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Delta States
State	Louisiana
Discipline Group	Agronomy
Practice Code/Name	342 - Critical Area Planting
Scenario ID	4
Scenario Name	Grass/legume mix-moderate grading
Scenario Description	Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural or human disturbance. Costs include a dozer for grading and shaping of small gullies, seedbed preparation with typical tillage implements, grass/legume seed, companion crop, and fertilizer and lime with application.
Before Practice Situation	Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from natural occurrences (fire, flood, etc) or human disturbance. The exposed areas have visible rills and small gullies averaging 1 foot in depth and 1 foot in width. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.
After Practice Situation	This typical 1.0 acre critical area is stabilized by grading and shaping the small gullies with a dozer (4 hours) and then applying fertilizer, lime and seed. Soil amendments will be incorporated at an depth of six inches to improve fertility and ensure establishment of permanent vegetative cover. Apply 30 lbs of nitrogen, 60 lbs of phosphate, and 60 lbs of potash, along with an application of 2 tons of lime. Prepare a firm, weed free seedbed so that proper germination and stand establishment are ensured. Once the seedbed has been prepared, drill the following mixture for a vegetative cover: Smooth Brome grass (15 lbs/ac) and Red Clover (8 lbs/ac) with a nurse crop of oats at a seeding rate of 48 lbs per acre.
Scenario Feature Measure	area seeded
Scenario Unit	Acre
Scenario Typical Size	1

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$244.32	\$244.32
Equipment/Installation	\$241.50	\$241.50
Labor	\$102.48	\$102.48
Mobilization	\$25.38	\$25.38
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$613.68	\$613.68

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	8	\$20.80
Materials	197	Oats (Avena sativa)	Small Grains, Cover Crops. Shipping not included.	Pound	\$0.46	48	\$22.08
Materials	1091	Bermuda Grass (Cynodon dactylon)	Introduced Perennial Grasses and shipping.	Pound	\$3.92	5	\$19.60
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$49.57	2	\$99.14
Materials	71	Nitrogen (N), Urea	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.59	30	\$17.70
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	50	\$39.00
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.52	50	\$26.00
Equipment/Installation	1100	Cultipacking	Includes equipment, power unit and labor costs.	Acre	\$7.67	1	\$7.67
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$12.90	1	\$12.90
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.33	1	\$6.33
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acre	\$8.86	2	\$17.72
Equipment/Installation	929	Dozer, 80 HP	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$49.22	4	\$196.88
Labor	233	Equipment Operators, Heavy	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$25.62	4	\$102.48
Mobilization	1144	Mobilization, Heavy Equipment Operator	Mobilization of heavy equipment operators: Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$25.38	1	\$25.38